West Lake Groundwater Monitoring SAP
Paul Rosasco
to:
Dan Gravatt, 'Muenks, Shawn'
06/08/2012 06:26 PM
Cc:
"'Merrigan, Jessie'", "'Whitby, Kathleen'", "'Warren, Victoria'", "'Charlotte L.Neitzel'", steven.golian, "Ward Herst"
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From: "Paul Rosasco" <paulrosasco@emsidenver.com> Sort List...

To: Dan Gravatt/R7/USEPA/US@EPA, "'Muenks, Shawn'" <shawn.muenks@dnr.mo.gov>

Cc: "'Merrigan, Jessie'" <JMerrigan@LathropGage.com>, "'Whitby, Kathleen'" <kwhitby@spencerfane.com>, "'Warren, Victoria'" <VWarren@republicservices.com>, "'Charlotte L.Neitzel'" <charlotte.neitzel@bryancave.com>, <steven.golian@em.doe.gov>, "Ward Herst" <wherst@herstassociates.com>

1 Attachment

SAP - Additional Groundwater Monitoring.pdf

Please replace the attachment included in the e-mail I just sent with this attachment. I forgot to make a few minor edits to the text in the prior attachment. Thank-you.

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ENGINEERING MANAGEMENT SUPPORT INC.

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June 8, 2012

U.S. Environmental Protection Agency
Region 7 SUPR / MOKS
901 N. 5th Street
Kansas City, Kansas 66101

ATTENTION: Mr. Dan Gravatt

SUBJECT: Sampling and Analysis Plan - Additional Groundwater Monitoring West Lake Landfill Operable Unit 1, Bridgeton, Missouri

Dear Dan,

During a May 10, 2012 conference call, the U.S. Environmental Protection Agency (EPA) asked the West lake Landfill Operable Unit-1 (OU-1) Respondents to perform an additional round of groundwater sampling at the West Lake Landfill. Engineering Management Support Inc. (EMSI), on behalf of Cotter Corporation (N.S.L.), Bridgeton Landfill, LLC, Rock Road Industries, Inc., and the United Sates Department of Energy (the OU-1 Respondents), is providing this letter to serve as the Sampling and Analysis Plan (SAP) for that additional groundwater sampling.

EPA has indicated that additional groundwater monitoring is necessary to verify that current groundwater quality is consistent with that characterized during sampling performed in 1995, 1996, and 1997 as part of the Remedial Investigation and in 2004 as part of the Feasibility Study activities for OU-1. This letter describes the proposed monitoring locations; sample collection procedures; analyte list, analytical laboratories, analytical methods; quality assurance/quality control samples and procedures; data evaluation and management procedures; and tentative schedule for the work.

Monitoring Locations

EPA requested that all of the available OU-1 and OU-2 monitoring wells be sampled as part of this effort.

EMSI retained Herst & Associates, Inc. (Herst) to conduct a site inspection and well inventory to ascertain the current number of wells at the site, conditions affecting access to the wells, the condition of the surface portions (protective casing, locks, etc.) of the wells, and the depth to water, total depth and downhole conditions as best as could be

determined during collection of depth to water and total depth measurements. The inspection did not include checking whether a pump or other sampling device could be lowered into the wells. Many of the wells are routinely checked by Herst for water levels as part of ongoing groundwater monitoring associated with post-closure care of the permitted solid waste landfill and thus did not need to be re-inspected as part of this effort.

Review of site documents indicated that approximately 115 wells have previously been present at the West Lake site. Figure 1 displays the locations of the various monitoring wells that have historically were present at the West Lake Landfill. Table 1 summarizes the current status of the various monitoring wells at the West Lake Landfill. Based on the results of the well inspection and review of information obtained during prior sampling activities, it was determined that 35 wells have been abandoned, destroyed, are damaged in a manner that would prevent collection of groundwater samples, or were previously reported as missing. Most of these unavailable wells were located on property no longer owned by the landfill and subsequently developed by others. Sixty-eight wells could be located, accessed and appear to be in a condition that is suitable for sampling. The status of the remaining 12 wells could not be determined because the wells could not be located or their locations could not be accessed due to heavy vegetative growth or fencing that restricted access to offsite properties.

Based on the results of the well inspection, the 80 wells (68 wells that were inspected and found to be in a condition potentially suitable for sampling plus the additional 12 wells of unknown status) listed in Table 2 are proposed for additional groundwater sampling. The locations of these wells are shown on Figure 2. Prior to conducting the groundwater sampling effort, vegetation must be cleared to allow for access to these wells. Although this SAP anticipates that up to 80 groundwater monitoring wells may be sampled, it is likely that some of the wells may not be located or may not be susceptible to sampling because of constrictions in the well casing.

Sample Collection

Samples will be collected from as many of the 80 wells listed in Table 2 that can be accessed and from which samples can be colllected. Prior to sample collection, the depth to water and total depth of each well to be sampled will be measured to calculate the volume of standing water in the well casings (casing volume).

A Waterra (or equivalent) inertial pump (http://www.waterra.com/index.html) consisting of a Waterra D-25, 2-inch diameter, acetal thermoplastic, standard flow (flow rate up to 1 gallon per minute) foot valve connected to high-density, polyethylene tubing will be installed in each monitoring well. A Waterra compatible surge block (e.g., Waterra SBD-25), or equivalent, may be added to the foot valve to assist with re-development of wells that have not been sampled in many years.

The Waterra pump will be used to purge the standing water from the well prior to sample collection. An automatic actuator may be used to produce the oscillating motion required by the Waterra pump. The volume of water removed from each well will be recorded.

Field parameters including, at a minimum, temperature, pH, and specific conductance, will be monitored using an in-line flow-through chamber during well purging at a minimum of intervals equivalent to one-half of a well casing volume. Well purging will continue until three successive sets of field parameter readings indicate stable water quality: specifically three successive temperature readings within 1 degree C, three successive pH readings within 0.2 pH unit, and three successive specific conductance readings within 10% of each other. A sample for laboratory analysis will then be collected regardless of the number of casing volumes removed except in the case of wells, if any, that are dewatered during well purging. In these instances, the water level in the subject well will be allowed to recover for 24 hours at which time a sample will be collected. In the event that the water level in a well does not recover sufficiently within 24 hours, a sample will not be collected from that well. In the event that well stabilization cannot be achieved through continued well purging (e.g., field parameters have not stabilized after removal of five casing volumes), a field decision will be made regarding the need for continued well purging versus collection of a sample.

Upon completion of sample collection, a short length of rope will be secured to the top of the pump tubing with the other end of the rope secured around the inner casing, to the well cap or to the outer casing as determined by the field crew. The well tubing will then be pushed down inside the well and trimmed as necessary to allow for placement of the well cap and securing of the protective casing.

Groundwater samples collected for laboratory analysis will placed in the appropriate pre-preserved bottles provided by the analytical laboratories. Samples to be analyzed for dissolved trace metals and radionuclides will be subjected to field filtering prior to placement in the pre-preserved sample bottles.

Chain-of-custody forms will be completed in the field by the sampling crew to document the names of the samplers, the actual samples collected by the sampling crew, the date and time of sample collection, the number and types of sample containers obtained from each well sampled, the type of preservation performed on each sample container, and the requested laboratory analyses. Chain-of-custody forms will be completed for each analytical laboratory used for the groundwater monitoring effort.

Laboratory Analyses

The collected samples will be analyzed for uranium, radium and thorium isotopes, EPATarget Analyte List (TAL) trace metals, TAL volatile organic compounds (VOCs), and TAL semivolatile organic compounds (SVOCs). Radionuclide and trace metal samples will be analyzed for both dissolved (field filtered samples) and total (unfiltered

samples) concentrations. Radionuclide analyses will be performed by Eberline Laboratory of Oak Ridge, Tennessee. All other analyses will be performed by Test America, either at its Earth City, Missouri laboratory or one of the other Test America laboratories depending upon laboratory capabilities and schedules at the time of sample delivery. Samples to be analyzed by Eberline will be shipped via overnight courier to the Eberline Laboratory in Oak Ridge, Tennessee. Samples to be analyzed by Test America will be delivered directly to Test America's Earth City laboratory for analysis there or shipment via overnight courier to another Test America laboratory, if necessary.

The samples will be analyzed using the following laboratory methods:

Analytes	Analytical Method
Thorium isotopes	NAS NS-3004
Uranium isotopes	NAS NS-3050
Radium-226	EPA 903.1
Radium-228	EPA 904.0
Trace metals	SW-846 6020
Volatile organic compounds	SW-846 8260B
Semi-volatile organic compounds	SW-846 8270C

Quality Assurance/Quality Control

The following quality assurance/quality control samples will be obtained in the field:

- Field duplicate samples – one duplicate sample per every ten investigative samples (duplicate samples will include duplicate sample bottles for all sample analytical fractions);
- VOC trip blanks – one sample per every sample container (e.g., cooler) delivered to the laboratory that contains samples for VOC analyses; and
- VOC, SVOC and trace metal matrix spike and matrix spike duplicate samples – one of each for every twenty investigative samples.

Additional quality assurance/quality control samples such as method blank samples, laboratory duplicate samples, laboratory control samples, surrogate spike samples, matrix spike and matrix spike duplicate samples will be prepared and analyzed by the analytical laboratories in accordance with the requirements of the analytical methods listed above and the laboratory's standard operating procedures.

Data Evaluation and Management

The analytical data will be subject to data validation in accordance with the requirements of the most recent EPA data validation procedure for each analyte group. All of the data will be subject to a Level III data validation plus checks on the laboratory instrument calibration, continuing calibration verification, and internal standards. Based on the results of the data validation effort, additional data qualifiers beyond those applied by the laboratories may be required for the analytical data. A data validation report will be prepared documenting the results of the data validation effort.

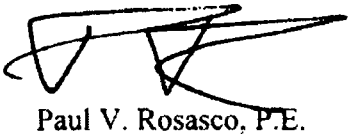
The results of the additional groundwater monitoring will be tabulated separately and in conjunction with the results obtained during the RI sampling conducted in 1995, 1996 and 1997 and the FS sampling conducted in 2004. A brief report describing the sampling activities will be prepared and will include the analytical data summary tables described above, the well sampling and purging forms, chain of custody reports, the analytical laboratory reports, and the data validation reports.

Anticipated Schedule of Activities

One round of groundwater sampling will be performed. Brush clearing activities to provide physical access to the monitoring wells will be scheduled upon receipt of EPA approval of this SAP. Allowing for scheduling and mobilization of a landscaping service crew, it is anticipated that it will take one to two weeks to complete the brush clearing activities. Groundwater sampling will be initiated within one week of completion of the brush clearing activities. Based on an assumed sample collection rate of five samples per day, it is anticipated that it will take three to four weeks to collect groundwater samples from the approximately 68 - 80 wells to be sampled as part of this effort. It is anticipated that it will take approximately three to four weeks for laboratory analyses of the samples. Data validation will take approximately four weeks and data evaluation and report preparation will take another two weeks. Consequently, the total estimated duration of the activities from EPA approval of this SAP until submittal of a sampling report is estimated to be approximately fourteen to seventeen weeks.

If you have any questions or desire additional information related to this SAP or any other aspect of the project, please do not hesitate to contact me.

Sincerely,
ENGINEERING MANAGEMENT SUPPORT, Inc.



Paul V. Rosasco, P.E.

Attachments:

Table 1 – List of Historic Monitoring Wells
Table 2 – List of Monitoring Wells to be Sampled
Figure 1 – Historic Monitoring Wells
Figure 2 – Monitoring Wells to be Sampled

Distribution:

Shawn Muenks – Missouri Department of Natural Resources
Jessica Merrigan – Lathrop & Gage
Kate Whitby – Spencer Fane Britt & Browne
Victoria Warren – Republic Services, Inc.
Charlotte Neitzel – Bryan Cave HRO
Steve Golian - U. S. Department of Energy
Ward Herst - Herst & Associates, Inc.

Table 1: List of Existing and Abandoned Monitoring Wells by Well Number, West Lake Landfill OU-1 and OU-2

Well Number	General Location	Inspected?	Condition
S-1	Radiological Area 2	No - area overgrown	Unknown
S-5	Radiological Area 1	Yes	Okay
S-8	Radiological Area 2	No - area overgrown	Unknown
S-10	Radiological Area 2	Yes	Okay
S-51	Closed Leachate Pond	No	Destroyed/Abandoned
S-52	Closed Leachate Pond	No	Destroyed/Abandoned
S-53	Closed Leachate Pond	No	Destroyed/Abandoned
S-54	Inactive Landfill	No	Abandoned 10/92
S-61	Radiological Area 2	Yes	Okay
S-75	Inactive Landfill	Yes	Casing damaged/obstructed
S-76	Inactive Landfill	No	Abandoned 10/92
S-80	Upgradient	No	Destroyed/Abandoned
S-82	Radiological Area 2	Yes	Okay
S-84	Radiological Area 1	Yes	Okay
S-88	Inactive Landfill	Yes	Destroyed/Abandoned
I-2	Radiological Area 2	No - area overgrown	Unknown-unable to locate previously
I-4	Radiological Area 1	Yes	Okay
I-7	Radiological Area 2	No - area overgrown	Unknown
I-9	Radiological Area 2	Yes	Okay - may be incorrectly labelled
I-11	Radiological Area 2	Yes	Okay
I-50	Upgradient	No	Destroyed/Abandoned
I-56	Inactive Landfill	Yes	Abandoned 10/92
I-58	Inactive Landfill	Yes	Abandoned 10/92
I-59	Radiological Area 2	Yes	Abandoned 10/92
I-62	Radiological Area 2	No - area overgrown	Unknown
I-65	Radiological Area 2	No - area overgrown	Unknown
I-66	Radiological Area 2	Yes	Okay
I-67	Closed Demolition Landfill	Yes	Okay
I-68	Radiological Area 1	Yes	Okay
I-72	Concrete/Asphalt Plants	No	Destroyed/Abandoned
I-73	Concrete/Asphalt Plants	Yes	Okay
D-3	Radiological Area 1	Yes	Okay
D-6	Radiological Area 2	Yes	Okay
D-12	Radiological Area 2	Yes	Okay
D-13	Radiological Area 2	Yes	Okay
D-14	Radiological Area 1	No	Destroyed/Abandoned
D-81	Inactive Landfill	No - area overgrown	Unknown
D-83	Radiological Area 2	No - area overgrown	Unknown
D-85	Radiological Area 1	Yes	Okay
D-87	Closed Demolition Landfill	Yes	Casing obstructed
D-89	Inactive Landfill	No	Destroyed/Abandoned
D-90	Upgradient	No	Reported as missing in 1994
D-91	Upgradient	No	Reported as missing in 1994
D-92	Closed Demolition Landfill	Yes	Destroyed/Abandoned
D-93	Radiological Area 2	Yes	Okay - may be incorrectly labelled

Table 1: List of Existing and Abandoned Monitoring Wells by Well Number, West Lake Landfill OU-1 and OU-2

Well Number	General Location	Inspected?	Condition
D-94	Radiological Area 2	No - area overgrown	Unknown - previous report - damaged
LR-100	Inactive Landfill	Yes	Destroyed/Abandoned
LR-101	Inactive Landfill	Yes	Destroyed/Abandoned
LR-102	Inactive Landfill	Yes	Unknown - beneath soil stockpile
LR-103	Inactive Landfill	Yes	Okay
LR-104	Concrete/Asphalt Plants	Yes	Okay
LR-105	Inactive Landfill	Yes	Okay
MW-101	Radiological Area 2	No - area overgrown	Unknown
MW-102	Radiological Area 2	Yes	Okay
MW-103	Inactive Landfill	Yes	Casing damaged/obstructed
MW-104	Inactive Landfill	Yes	Okay
MW-105	Earth City	No	Destroyed/Abandoned
MW-106	Upgradient	No	Destroyed/Abandoned
MW-107	Upgradient	No	Destroyed/Abandoned
MW-1204	South Quarry	Yes	Okay
MW-1205	unknown	No	Abandoned/decomissioned
MW-1206	unknown	No	Abandoned/decomissioned
MW-F1D	North Quarry	No	Destroyed/Abandoned
MW-F1S	North Quarry	No	Destroyed/Abandoned
MW-F2	Inactive Landfill	Yes	Destroyed/Abandoned
MW-F3	Radiological Area 2	No	Destroyed/Abandoned
PZ-100-SD*	North Quarry	Yes	Okay
PZ-100-SS*	North Quarry	Yes	Okay
PZ-100-KS	North Quarry	Yes	Okay
PZ-101-SS	North Quarry	Yes	Okay
PZ-102-SS	North Quarry	Yes	Okay
PZ-102R-SS	North Quarry	Yes	Okay
PZ-103-SS	South Quarry	Yes	Okay
PZ-104-SD*	South Quarry	Yes	Okay
PZ-104-SS*	South Quarry	Yes	Okay
PZ-104-KS	South Quarry	Yes	Okay
PZ-105-SS*	South Quarry	Yes	Okay
PZ-106-SD*	South Quarry	Yes	Okay
PZ-106-SS*	South Quarry	Yes	Okay
PZ-106-KS	South Quarry	Yes	Okay
PZ-107-SS	Inactive Landfill	Yes	Okay
PZ-108-SS*	South Quarry	Yes	Okay
PZ-109-SS*	South Quarry	Yes	Okay
PZ-110-SS*	North Quarry	Yes	Okay
PZ-111-SD*	North Quarry	Yes	Okay
PZ-111-KS	North Quarry	Yes	Okay
PZ-112-AS	Radiological Area 1	Yes	Okay
PZ-113-AD	Closed Demolition Landfill	Yes	Okay
PZ-113-AS	Closed Demolition Landfill	Yes	Okay
PZ-113-SS	Closed Demolition Landfill	Yes	Okay

Table 1: List of Existing and Abandoned Monitoring Wells by Well Number, West Lake Landfill OU-1 and OU-2

Well Number	General Location	Inspected?	Condition
PZ-114-AS*	North Quarry	Yes	Okay
PZ-115-SS*	North Quarry	Yes	Okay
PZ-116-SS	South Quarry	Yes	Okay
PZ-200-SS	North Quarry	Yes	Okay
PZ-201A-SS*	South Quarry	Yes	Okay
PZ-202-SS	South Quarry	Yes	Okay
PZ-203-SS	South Quarry	Yes	Okay
PZ-204-SS	South Quarry	Yes	Okay
PZ-204A-SS	South Quarry	Yes	Okay
PZ-205-AS	South Quarry	Yes	Okay
PZ-205-SS*	South Quarry	Yes	Okay
PZ-206-SS	Concrete/Asphalt Plants	Yes	Okay
PZ-207-AS	Closed Demolition Landfill	Yes	Okay
PZ-208-SS	North Quarry	Yes	Okay
PZ-300-AS	Upgradient	No	Destroyed/Abandoned
PZ-300-AD	Upgradient	No	Destroyed/Abandoned
PZ-300-SS	Upgradient	No	Destroyed/Abandoned
PZ-301-SS	Upgradient	No	Destroyed/Abandoned
PZ-302-AI	Inactive Landfill	Yes	Okay
PZ-302-AS	Inactive Landfill	Yes	Okay
PZ-303-AS	Inactive Landfill	Yes	Okay
PZ-304-AI	Inactive Landfill	Yes	Okay
PZ-304-AS	Inactive Landfill	Yes	Okay
PZ-305-AI	Concrete/Asphalt Plants	Yes	Okay
PZ-1201-SS	South Quarry	Yes	Unknown - location buried beneath soil

* Included in monitoring program for the permitted solid waste landfill.

Table 2: List of Monitoring Wells Potentially Available for Sampling, West Lake Landfill OU-1 and OU-2

Well Number	General Location	Inspected?	Condition
D-12	Radiological Area 2	Yes	Okay
D-13	Radiological Area 2	Yes	Okay
D-3	Radiological Area 1	Yes	Okay
D-6	Radiological Area 2	Yes	Okay
D-85	Radiological Area 1	Yes	Okay
I-11	Radiological Area 2	Yes	Okay
I-4	Radiological Area 1	Yes	Okay
I-66	Radiological Area 2	Yes	Okay
I-67	Closed Demolition Landfill	Yes	Okay
I-68	Radiological Area 1	Yes	Okay
I-73	Concrete/Asphalt Plants	Yes	Okay
LR-103	Inactive Landfill	Yes	Okay
LR-104	Concrete/Asphalt Plants	Yes	Okay
LR-105	Inactive Landfill	Yes	Okay
MW-102	Radiological Area 2	Yes	Okay
MW-104	Inactive Landfill	Yes	Okay
MW-1204	South Quarry	Yes	Okay
PZ-100-KS	North Quarry	Yes	Okay
PZ-100-SD*	North Quarry	Yes	Okay
PZ-100-SS*	North Quarry	Yes	Okay
PZ-101-SS	North Quarry	Yes	Okay
PZ-102R-SS	North Quarry	Yes	Okay
PZ-102-SS	North Quarry	Yes	Okay
PZ-103-SS	South Quarry	Yes	Okay
PZ-104-KS	South Quarry	Yes	Okay
PZ-104-SD*	South Quarry	Yes	Okay
PZ-104-SS*	South Quarry	Yes	Okay
PZ-105-SS*	South Quarry	Yes	Okay
PZ-106-KS	South Quarry	Yes	Okay
PZ-106-SD*	South Quarry	Yes	Okay
PZ-106-SS*	South Quarry	Yes	Okay
PZ-107-SS	Inactive Landfill	Yes	Okay
PZ-108-SS*	South Quarry	Yes	Okay
PZ-109-SS*	South Quarry	Yes	Okay
PZ-110-SS*	North Quarry	Yes	Okay
PZ-111-KS	North Quarry	Yes	Okay
PZ-111-SD*	North Quarry	Yes	Okay
PZ-112-AS	Radiological Area 1	Yes	Okay
PZ-113-AD	Closed Demolition Landfill	Yes	Okay
PZ-113-AS	Closed Demolition Landfill	Yes	Okay
PZ-113-SS	Closed Demolition Landfill	Yes	Okay
PZ-114-AS*	North Quarry	Yes	Okay
PZ-115-SS*	North Quarry	Yes	Okay
PZ-116-SS	South Quarry	Yes	Okay
PZ-200-SS	North Quarry	Yes	Okay

Table 2: List of Monitoring Wells Potentially Available for Sampling, West Lake Landfill OU-1 and OU-2

Well Number	General Location	Inspected?	Condition
PZ-201A-SS*	South Quarry	Yes	Okay
PZ-202-SS	South Quarry	Yes	Okay
PZ-203-SS	South Quarry	Yes	Okay
PZ-204A-SS	South Quarry	Yes	Okay
PZ-204-SS	South Quarry	Yes	Okay
PZ-205-AS	South Quarry	Yes	Okay
PZ-205-SS*	South Quarry	Yes	Okay
PZ-206-SS	Concrete/Asphalt Plants	Yes	Okay
PZ-207-AS	Closed Demolition Landfill	Yes	Okay
PZ-208-SS	North Quarry	Yes	Okay
PZ-302-AI	Inactive Landfill	Yes	Okay
PZ-302-AS	Inactive Landfill	Yes	Okay
PZ-303-AS	Inactive Landfill	Yes	Okay
PZ-304-AI	Inactive Landfill	Yes	Okay
PZ-304-AS	Inactive Landfill	Yes	Okay
PZ-305-AI	Concrete/Asphalt Plants	Yes	Okay
S-10	Radiological Area 2	Yes	Okay
S-5	Radiological Area 1	Yes	Okay
S-61	Radiological Area 2	Yes	Okay
S-82	Radiological Area 2	Yes	Okay
S-84	Radiological Area 1	Yes	Okay
D-93	Radiological Area 2	Yes	Okay - may be incorrectly labelled
I-9	Radiological Area 2	Yes	Okay - may be incorrectly labelled
D-81	Inactive Landfill	No - area overgrown	Unknown
D-83	Radiological Area 2	No - area overgrown	Unknown
I-62	Radiological Area 2	No - area overgrown	Unknown
I-65	Radiological Area 2	No - area overgrown	Unknown
I-7	Radiological Area 2	No - area overgrown	Unknown
MW-101	Radiological Area 2	No - area overgrown	Unknown
S-1	Radiological Area 2	No - area overgrown	Unknown
S-8	Radiological Area 2	No - area overgrown	Unknown
LR-102	Inactive Landfill	Yes	Unknown - beneath soil stockpile
PZ-1201-SS	South Quarry	Yes	Unknown - buried beneath soil
D-94	Radiological Area 2	No - area overgrown	Unknown-previous report - damaged
I-2	Radiological Area 2	No - area overgrown	Unknown-unable to locate previously

* Included in monitoring program for the permitted solid waste landfill.

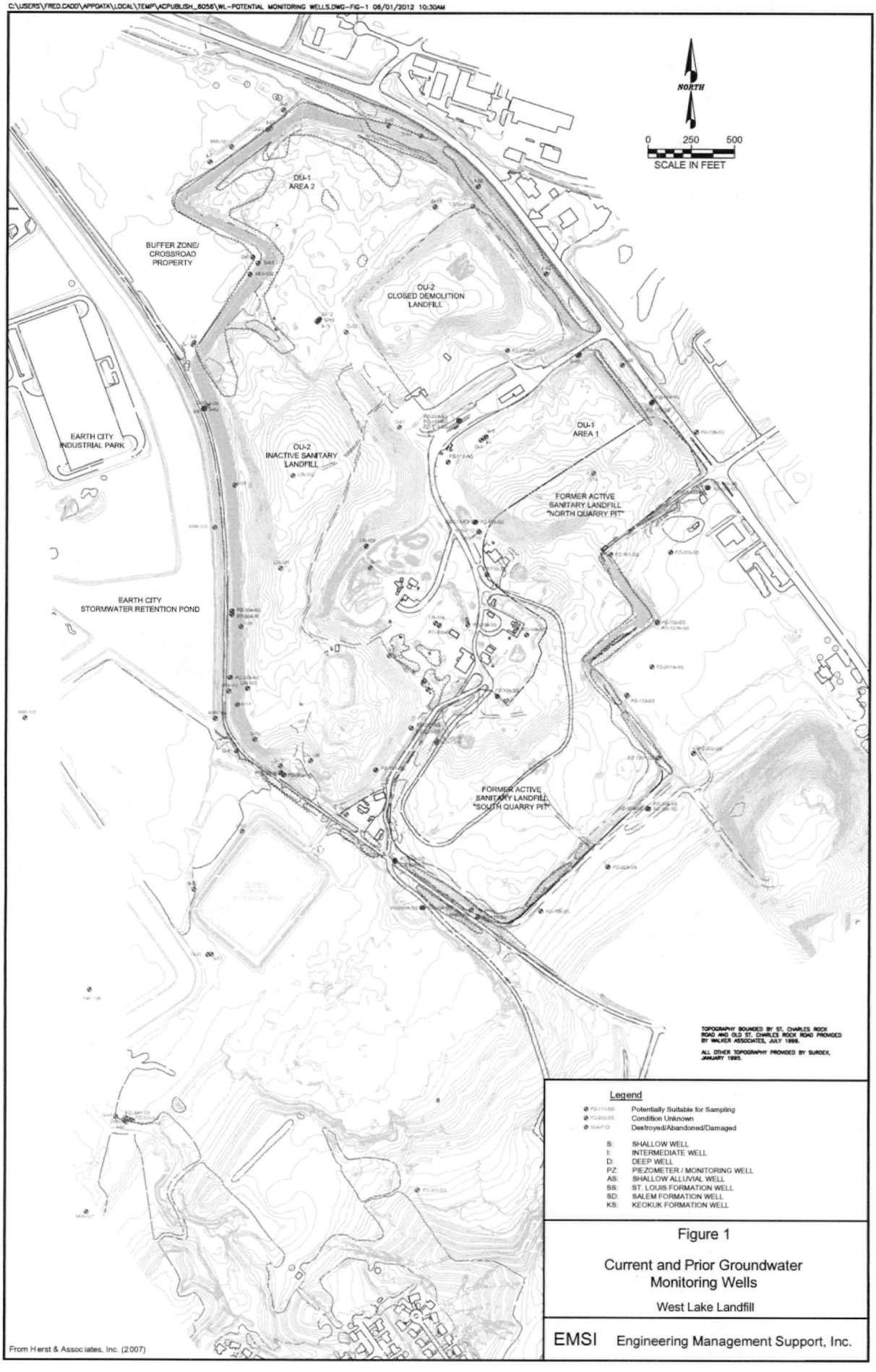


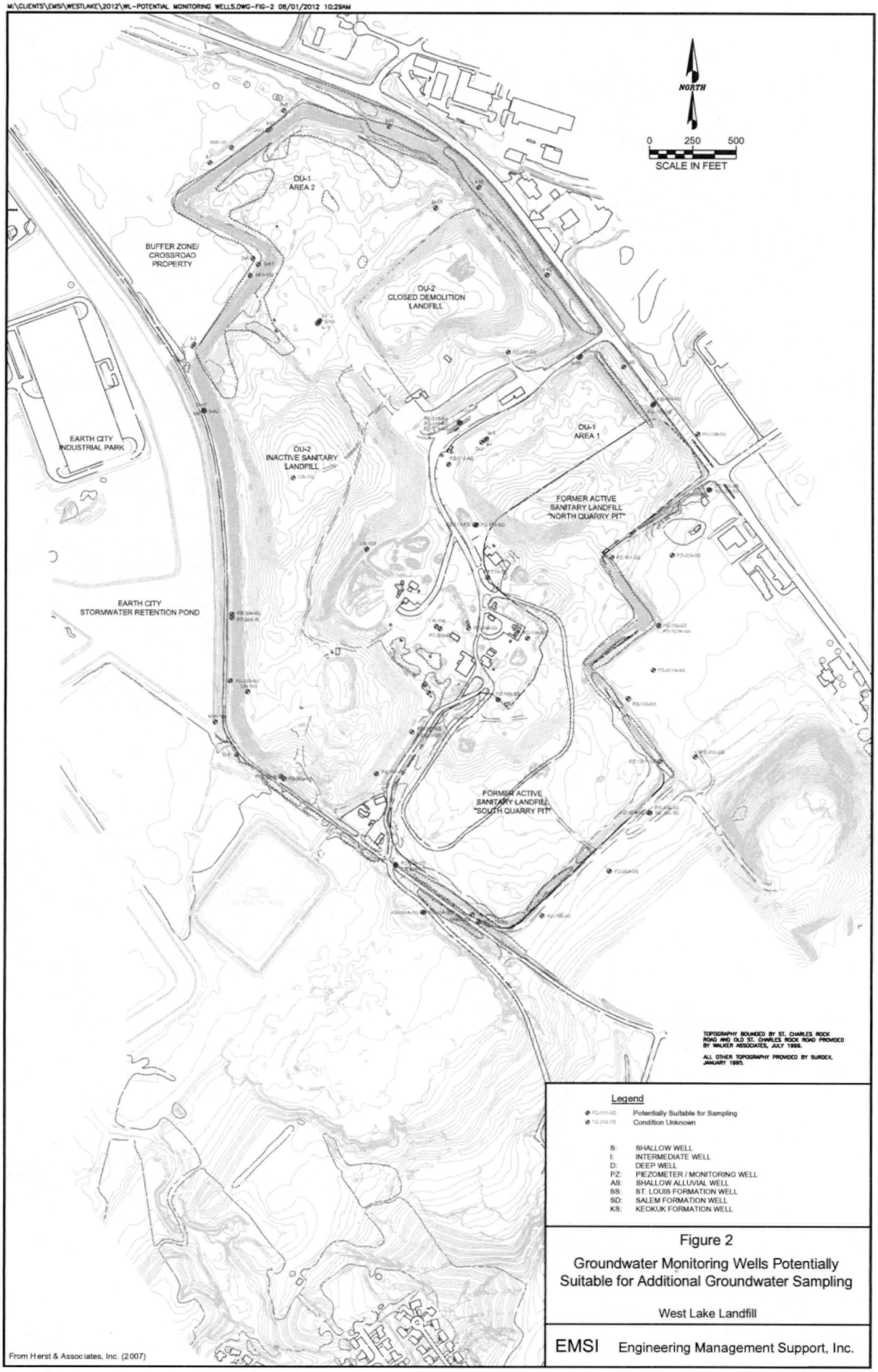
Figure 1

Current and Prior Groundwater Monitoring Wells

West Lake Landfill

EMSI Engineering Management Support, Inc.

M:\CLIENTS\EMSI\WESTLAKE\2012\WL-POTENTIAL MONITORING WELLS.DWG-FIG-2 06/01/2012 10:29AM



From Herst & Associates, Inc. (2007)

Figure 2

Groundwater Monitoring Wells Potentially Suitable for Additional Groundwater Sampling

West Lake Landfill

EMSI Engineering Management Support, Inc.